CLAIM AMENDMENTS

Please amend claims 1-10, 13, and 20 as follows:

1. (Currently Amended) A method, comprising:

automatically providing a plurality of color values as input to an image processing device, wherein said image processing device is under a control of a particular dimensional order;

dynamically determining which color value among said plurality of color values has attained a gamut limit;

transforming said particular dimensional order of said color which was determined to have attained said gamut limit, in response to dynamically determining which color value among said plurality of color values has attained gamut limit; and

thereafter automatically reducing said particular dimensional order through use of a dedicated gamut mapping function allowing for an improved estimate of said color based on said reduced dimensional order, thereby providing improved control for colors that are located external to said gamut and maintaining said color's hue.

2. (Currently Amended) The method of claim 1 ~~further comprising~~

wherein a color sensor is used in ~~said~~ dynamically determining which color value among said plurality of color values has attained a gamut limit. ~~further comprises:~~

~~dynamically determining utilizing a color sensor which color among a plurality of three colors has attained said gamut limit, wherein said plurality of three colors comprises cyan, magenta, and yellow and wherein said color sensor comprises an offline sensor or an inline sensor or a combination thereof.~~

3. (Currently Amended) The method of claim 1 wherein said particular dimensional order comprises a three-dimensional order represented by the

colors cyan, magenta, and yellow.

4. (Currently Amended) The method of claim 3 wherein ~~said~~ reducing said particular dimensional order, further comprises:

reducing said three-dimensional order to a two-dimensional order.

5. (Currently Amended) The method of claim 3 wherein ~~said~~ reducing said particular dimensional order, further comprises:

reducing said three-dimensional order to a one-dimensional order.

6. (Currently Amended) The method of claim 1 wherein ~~said~~ a ray-based approach consisting of a ray being drawn from a desired color to a point on a neutral axis through said gamut limit is used to perform said gamut mapping. ~~dynamically determining which color value among said plurality of color values has attained a gamut limit, further comprises:~~

~~dynamically determining utilizing a color sensor which color among a plurality of three colors has attained said gamut limit, wherein said plurality of three colors comprises cyan, magenta, and yellow~~.

7. (Currently Amended) The method of claim ~~6~~ 2 wherein said color sensor comprises an offline sensor.

8. (Currently Amended) The method of claim ~~6~~ 2 wherein said color sensor comprises an inline sensor.

9. (Currently Amended) A method, comprising:

automatically providing a plurality of color values as input to an image processing device, wherein said image processing device is under a control of a three-dimensional order;

dynamically determining utilizing a color sensor, which color among ~~a~~ said plurality of ~~three~~ colors has attained said gamut limit, wherein said determined color is comprised of a plurality of ~~three~~ the colors ~~comprises~~

cyan, magenta, and yellow representing said three-dimensional order;

transforming said three-dimensional order, in response to dynamically determining which color ~~value~~ among said plurality of three ~~color values~~ colors cyan, magenta, and yellow has attained said gamut limit; and

automatically reducing said three-dimensional order, thereby providing improved control for colors that are located external to said gamut.

10. (Currently Amended) A system, comprising:

a plurality of color values automatically provided as input to an image processing device, wherein said image processing device is under a control of a particular dimensional order;

a color sensor for dynamically determining which color value among said plurality of color values has attained a gamut limit;

an iterative controller; and

a transformation module provided inside said iterative controller for automatically reducing said particular dimensional order based on determining which color value among said plurality of color values has attained said gamut limit, thereby providing improved control for colors that are located external to said gamut.

11. (Original) The system of claim 10 wherein said transformation module further comprises a transformation module for transforming said particular dimensional order, in response to dynamically determining which color value among said plurality of color values has attained gamut limit.

12. (Original) The system of claim 10 wherein said particular dimensional order comprises a three-dimensional order.

13. (Currently Amended) The system of claim 12 wherein said transformation module further comprises a ~~transformation~~ compensation module for reducing said three-dimensional order to a two-dimensional order using a standard International Color Consortium (ICC) framework.

14. (Original) The system of claim 13 wherein said transformation module reduces said three-dimensional order to said two-dimensional order in response to determining which colors among said plurality of colors have attained said gamut limit.

15. (Original) The system of claim 12 wherein said transformation module further comprises a transformation module for reducing said three-dimensional order to a one-dimensional order.

16. (Previously Amended) The system of claim 15 wherein said transformation module reduces said three-dimensional order to said one-dimensional order in response to determining which color among said plurality of colors has attained said gamut limit.

17. (Previously Amended) The system of claim 10 wherein said color sensor comprises an offline sensor.

18. (Previously Amended) The system of claim 10 wherein said color sensor comprises an inline sensor.

19. (Previously Amended) The system of claim 10 further comprising a color rendering device associated with said transformation module and wherein said transformation module is integrated with said image processing device.

20. (Currently Amended) The system of claim ~~18~~ 10 wherein said ~~further comprising an~~ iterative ~~controller whose~~ controller's iterative output is input to said color rendering device, such that said iterative output of said iterative controller reflects a plurality of compensated color values requiring correction for rendering variations thereof.

21. (Previously Amended) The system of claim 18 wherein said color rendering device comprises a printer.

22. (Previously Amended) The system of claim 18 wherein said color rendering device comprise a photocopy machine.